## 10/840, 151

(FILE 'HOME' ENTERED AT 15:59:19 ON 07 MAR 2005)

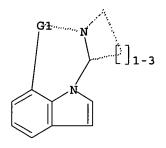
FILE 'REGISTRY' ENTERED AT 16:00:43 ON 07 MAR 2005 STRUCTURE UPLOADED

=> D L1

L1

L1 HAS NO ANSWERS

L1



G1 Co, Ir, Ni, Pd, Pt, Rh

Structure attributes must be viewed using STN Express query preparation.

=> S L1

SAMPLE SEARCH INITIATED 16:01:06 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -54 TO ITERATE

100.0% PROCESSED 54 ITERATIONS O ANSWERS

SEARCH TIME: 00.00.01

\*\*COMPLETE\*\* FULL FILE PROJECTIONS: ONLINE

\*\*COMPLETE\*\* BATCH

PROJECTED ITERATIONS: 640 TO 0 TO 0

PROJECTED ANSWERS:

0 SEA SSS SAM L1

=> S L1 FULL

FULL SEARCH INITIATED 16:01:12 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED -1225 TO ITERATE

100.0% PROCESSED 1225 ITERATIONS 4 ANSWERS

SEARCH TIME: 00.00.01

4 SEA SSS FUL L1

=> FIL CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL

> SESSION ENTRY

FULL ESTIMATED COST 161.75 161.33

FILE 'CAPLUS' ENTERED AT 16:01:18 ON 07 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 7 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 6 Mar 2005 (20050306/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L3

L4 3 L3

=> D 1-3 BIB ABS

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:999709 CAPLUS

DN 141:417587

TI Phosphorescent organometallic complexes and light-emitting element

containing the complexes

IN Seo, Satoshi; Tokuda, Atsushi; Inoue, Hideko

PA Semiconductor Energy Laboratory Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2004230061	<b>A1</b>	20041118	US 2004-840151	20040506
	JP 2005002101	A2	20050106	JP 2004-139984	20040510
	US 2005033054	A1	20050210	US 2004-926382	20040825
PF	RAI JP 2003-138862	Α	20030516		
	US 2004-840151	A1	20040506		
0.5	MARPAT 141:417587			•	4
GI	<del>.</del>				

$$R^{5}$$
 $R^{4}$ 
 $R^{3}$ 
 $R^{2}$ 

AB Organometallic complexes are described by the general formula (I) where each of R1-5 is selected from H, a halogen atom, a lower alkyl group, an alkoxy group, an acyl group, a nitro group, a cyano group, an amino group, a dialkylamino group, a diaryl amino group, a vinyl group, an aryl group, and a heterocyclic group; where Y is a heterocyclic group containing a N as a hetero atom; where M is ≥1 of atoms of group 9 and group 10 in the periodic table, where when the M is the atom of group 9 in the periodic table, n=2, where when the M is the atom of group 10 in the periodic table, n=1; and where L is selected from the group consisting of a monoanionic bidentate chelate ligand having a beta diketone structure, a monoanionic bidentate chelate ligand having a carboxy group and a monoanionic bidentate chelate ligand having a phenol hydroxy group. Phosphorescent materials and light-emitting devices based on the above complexes are also discussed.

Ι

```
ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
L4
AN
    2004:450767 CAPLUS
DN
    141:23731
    Cost-effective preparation of asymmetric transition metal complexes
ΤI
    Akiyama, Seiji; Yabe, Masayoshi; Oba, Shiho
IN
PA
    Mitsubishi Chemical Corp., Japan
    Jpn. Kokai Tokkyo Koho, 30 pp.
SO
    CODEN: JKXXAF
DT
    Patent
    Japanese
LΑ
FAN.CNT 1
                      KIND DATE APPLICATION NO.
    PATENT NO.
                                                              DATE
                      ----
                                         -----
     ______
                              -----
                                                                _____
    JP 2004155728
                              20040603 JP 2002-324175
                        A2
                                                               20021107
PRAI JP 2002-324175
                              20021107
    MARPAT 141:23731
GI
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
    The complexes I [M2 = transition metal; n2 = the number of bidentate liquid =
AB
     (valence of M2) - 1; Z = direct bond, 2-4-valent linkage; Q1, Q2 = C, N;
    W1-W4 = H, substituent; W1W2, W2W3, and W3W4 may form ring; X, Y = O, S,
    N, P] are prepared from alkali metal or alkaline earth metal complexes II (M1 =
    alkali metal, alkaline earth metal; n = the number of ligand = valence of M1; X,
    Y = same as above). Thus, 2-(2-pyridyl)benzothiophene was treated with
    IrCl3 to give III, which was treated with Na acetylacetonate to give IV.
L4
    ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
AN
    2003:945449 CAPLUS
DN
    140:21334
    Iridium or platinum coordination compounds for organic electroluminescent
TI
    devices and displays
```

Igawa, Satoshi; Takiguchi, Takao; Kamatani, Atsushi; Okada, Shinjiro;

DATE

20031203

20020530

Tsuboyama, Akira; Miura, Kiyoshi; Moriyama, Takashi; Iwawaki, Hironobu

APPLICATION NO.

JP 2002-156586

-----

20020530

IN

PΑ

SO

DT

LA

PΤ

os

GI

FAN.CNT 1

Canon Inc., Japan

CODEN: JKXXAF

PATENT NO.

PRAI JP 2002-156586

JP 2003342284

MARPAT 140:21334

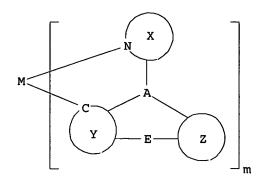
Patent Japanese

Jpn. Kokai Tokkyo Koho, 17 pp.

KIND

----

A2



II

I

$$M \left[ \begin{array}{c} O \longrightarrow \\ O \longrightarrow \\ G' \end{array} \right]_{n}$$

M N X'

III

The compds. are MLmL'n [M = Ir, Pt; m = 1-3; n = 0-2; m + n = 2, 3; MLm = I; ML'n = II or III; X, X' = cyclic group coordinated to M via N; Y = cyclic group coordinated to M via C; Z = cyclic group; A = CR, N, B, SiR'; R, R' = H, aryl, C1-20 alkyl; E = single bond, C1-4 alkylene; G, G', J = C1-20 alkyl, di(substituted)amino, aryl; J may be H]. The devices and displays show less time degradation of luminescence intensity.

## 10/840,151

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	37593	LIGHT ADJ EMITTING ADJ ELEMENT	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/07 16:26
L3	764828	L2 AND ORGANOMETALLIC COMPLEX	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/07 16:26
L4	18	L2 AND (ORGANOMETALLIC ADJ COMPLEX)	US-PGPUB; USPAT; EPO; JPO	OR	OFF	2005/03/07 16:26